

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 2002020857  
PUBLICATION DATE : 23-01-02

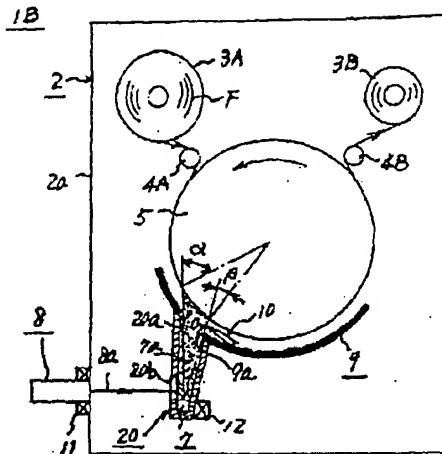
APPLICATION DATE : 06-07-00  
APPLICATION NUMBER : 2000204917

APPLICANT : VICTOR CO OF JAPAN LTD;

INVENTOR : SEGAWA MASARU;

INT.CL. : C23C 14/24 G11B 5/85

TITLE : VACUUM FILM DEPOSITION APPARATUS, AND CRUCIBLE FOR FILM DEPOSITION



ABSTRACT : PROBLEM TO BE SOLVED: To improve the efficiency of utility of a film depositing material stored in a crucible for film deposition.

SOLUTION: This vacuum film deposition apparatus has a vacuum tank 2 comprising at least a cooling can roll 5 rotating while cooling a back side of a base film F, a crucible 20 for film deposition which is provided below the cooling can roll to store material 7 for film deposition, a heat source 8 for evaporation which melts the material 7 for film deposition in the crucible for film deposition to evaporate flying particles 7a, and a cooling plate 9 which is provided close to the cooling can roll between the cooling can roll and the crucible, cools a film deposition surface side of the base film, and has an aperture 9a for regulating the angle  $\alpha$  of incidence when the film deposition on the base film is started and the angle  $\beta$  of incidence when the film deposition is completed. In the crucible 20, an upper end side aperture 20a with an upper end side opened is extended to the vicinity of the aperture 9a of the cooling plate 9 in order to evaporate the flying particles toward the base film side attached to the cooling can roll, and the upper end side aperture is substantially provided along the aperture of the cooling plate.

COPYRIGHT: (C)2002,JPO